REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 1 and 3-6 are now active in this application. Claims 7 and 8 have been withdrawn, and claim 2 has been canceled. Claim 1 is herein amended. Support for the amendment of claim 1 is found at least in the specification at page 12, lines 9-11 and in Figure 1. No new matter is added.

In the outstanding Office Action, Claims 1, 3, and 4 were rejected under 35 U.S.C. §103(a) as obvious over Ito, EP 1146569, in view of De Francesco, U.S. Patent No. 5,733,511. Claim 5 was rejected under 35 U.S.C. §103(a) as obvious over Ito and De Francesco in view of Pote, U.S. Patent No. 5,239,134. Claim 1, from which claims 3-6 depend, is herewith amended. Applicants submit that these rejections are obviated by the present amendment of claim 1.

Amended claim 1 is directed to a method for plasma-enhanced chemical vapor deposition in which a discharge electrode and a substrate are disposed opposite to each other in a vacuum film formation chamber. A gas for forming a film containing a substance has been introduced into the vacuum film formation chamber. High-frequency electric power generated by a high-frequency electric power feeding circuit is fed to a plurality of feeding points provided to the discharge electrode through a plurality of external cables which are disposed outside the vacuum film formation chamber. The electric power is then fed through a plurality of internal cables which are disposed inside the vacuum film formation chamber. The internal cables correspond with the external cables, respectively, so as to generate plasma between the discharge electrode and the substrate to vapor deposit the substance on the substrate. The discharge electrode is assembled from a plurality of longitudinal electrodes

which are parallel, with a pair of transverse electrodes disposed in parallel and opposite to each other. Each of the transverse electrodes is provided with a plurality of feeding points. A plurality of high-frequency electric power supplies feed the high-frequency electric power to the plurality of the feeding points through the external cable and the internal cables. Phases of the high-frequency electric power at the feeding points are adjusted by changing electrical characteristics of the external cables. The high-frequency electric power is fed to the plurality of feeding points. The phases of the high-frequency electric power at the feeding points are adjusted by (1) carrying out vapor deposition with change in electrical characteristics of the external cables, (2) carrying out observations of the condition of the substance which has been vapor deposited on the substrate, and (3) changing the electrical characteristics of the external cables on the basis of the observations.

The presently claimed method for plasma-enhanced chemical vapor deposition includes a discharge electrode. The discharge electrode is described in the specification at page 12, lines 9-15, and in Figure 1. As seen in Figure 1, the discharge electrode 11 is assembled in the form of a lattice from a plurality of longitudinal electrode rods 11a, which are parallel, and a pair of transverse electrode rods 11b and 11c. The transverse electrode rods are disposed in parallel and opposite to each other. Each of the transverse electrode rods 11a and 11c is provided with a plurality of feeding points 15a to 15h and 16a to 16h. As discussed in the specification at page 15, line 11 to page 16, line 3, very high frequency (VHF) electric power is distributed via a matching box 22a and an electric power divider 17a to the feeding points 15a to 15h. The VHF electric power, which has a different phase from that distributed to feeding points 15a to 15h, is distributed via another matching box 22b and another electric power divider 17b to feeding points 16a to 16h. Thus, by virtue of the transverse electrode rods disposed parallel and opposite to each other, electric power is fed to both ends of each longitudinal electrode in the method of claim 1.

Ito, on the other hand, teaches rod-shaped electrodes in Figs. 2, 3, and 5, and electrodes having a U-shape in Fig. 8, and electrodes in a rectangular- folded shape. Ito does not teach or suggest an electrode having a pair of transverse electrode rods and a plurality of longitudinal electrode rods. Further, Ito teaches an electrode with one end being a feeding section connected to a high frequency power source. *See* Ito, paragraph [0036], Figs. 2, 3, 5 and 8. Thus, with Ito,the power is fed to only one end of the electrode.

The Office asserts in the outstanding Office Action that the combination of Ito, De Francesco, and/or Pote render the claims obvious. However, every word in a claim must be considered in determining the question of patentability against the prior art. *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). Ito does not teach a method using an electrode having a pair of transverse electrode rods disposed in parallel and opposite to each other. Nor does it teach a method using an electrode with a plurality of longitudinal electrode rods. Moreover, neither of De Francesco or Pote can remedy the deficiencies of Ito. Failing to teach or suggest these elements, Applicants respectfully request withdrawal of the present rejections, and allowance of claim 1 and the claims depending therefrom.

In light of the above discussion, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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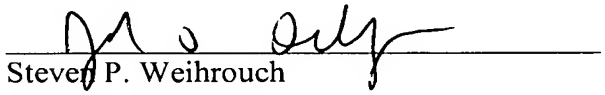

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